

***Trichocline dealbata* (HOOK. & ARN.) BENTH. &  
HOOK. f. ex GRISEB. (Compositae: Mutisieae),  
saved by ICBN Art. 33.2**

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**Abstract**

The combination *Trichocline dealbata* (HOOK. & ARN.) "BENTH. & HOOK. f. ex GRISEB." is valid, albeit GRISEBACH did not explicitly cite the basionym. The GRISEBACH and the HOOKER and ARNOTT names are thus homotypic (nomenclatural) synonyms, as allowed by application of the newly reworded ICBN Art 33.2. The combination *Trichocline dealbata* is thus not to be attributed to HIERONYMUS (as done in Index Kewensis, an interpretation under which the GRISEBACH name would block that of HIERONYMUS), and the senior synonym (*Chaetanthera parviflora*) does not need to be transferred to *Trichocline*.

Argentina

**Introduction**

Many "presumed" new combinations that do not explicitly cite a basionym are, nevertheless, to be taken as combinations as per the newly reworded ICBN Art 33.2 (GREUTER et al. 2000). The following example illustrates this point, specifically showing that there is a single legitimate (rather than two heterotypic names as) *Trichocline dealbata* (Compositae: Mutisieae).

In Index Kewensis, JACKSON (1895) treated *Chaetanthera dealbata* HOOK. & ARN. as the basis of "*Trichocline dealbata* BENTH. & HOOK. f. ex HIERON.," perhaps because there is no explicit citation of the valid basionym of *Chaetanthera dealbata* HOOK. & ARN. in the earlier GRISEBACH (1879). CABRERA (1971), however, cited the transfer of *Chaetanthera dealbata* HOOK. & ARN. to *Trichocline* CASS. as being effected by GRISEBACH (1879). This interpretation was followed by ZARDINI (1975) and MARTICORENA & QUEZADA (1985).

The names involved thereby are homotypic as allowed in ICBN 33.2 (GREUTER et al. 2000). Given the conspecific nature of LORENTZ 1310 and the type *Chaetanthera dealbata* HOOK. & ARN., the combination *Trichocline dealbata* is not to be attributed to HIERONYMUS (which would thus be blocked by the earlier GRISEBACH name), and the

senior synonym (*Chaetanthera parviflora*) does not need to be transferred to *Trichocline*. The name and author citation of this uncommon southern Andean composite remains “*Trichocline dealbata* (HOOK. & ARN.) BENTH. & HOOK. f. ex GRISEB.”

The treatments of GRISEBACH (1879) and HIERONYMUS (1882a, 1882b) for this species are as follows:

**GRISEBACH (1879: 215):**

1310. *T. dealbata*. BENTH. HOOK. ex descr. - Syn. *Bichenia* DON. Involucri squamae rub3seriales [sic! sphalm. for ‘sub3seriales’], exteriores breves, omnes acuminatae; ligulae radii 4nerves. Nom. vernac. Contrayerba. - Ct. (“Mendoza”).

The collector in GRISEBACH (1879), except where stated otherwise, is LORENTZ, and “Ct.” refers to Prov. Catamarca. The generic name *Trichocline* appears with the first species on page 214, but is then abbreviated on pages 214–215.

**HIERONYMUS (1882a: 359; 1882b: 165):**

*Trichocline dealbata* (sec. BENTH. HOOK. gen. II, p. 497), syn. *Chaetanthera dealbata* (HOOK. et ARN. comp. I, p. 104). N.v. yerba del corro, yerba corro. M. Ct. (cordilleras).

GRISEBACH (1879) attributed the name *T. dealbata* to BENTHAM & HOOKER, but did not explicitly cite a valid binomial as the basis of *T. dealbata*. GRISEBACH cited only “*Bichenia* DON,” perhaps in reference to the invalid manuscript name “*Bichenia dealbata* DON” cited by HOOKER & ARNOTT (1835). BENTHAM & HOOKER (1873) treated *Bichenia* as a synonym of *Trichocline*, but mentioned neither *Chaetanthera dealbata* nor *Trichocline dealbata*.

HIERONYMUS (1882a, b) was the first to explicitly cite *Chaetanthera dealbata* as the basionym of *Trichocline dealbata*. If, however, HIERONYMUS (1882a, b) is taken as the place of the first valid combination for *Chaetanthera dealbata* HOOK. & ARN. in *Trichocline*, the earlier GRISEBACH name would need to be taken as an independent heterotypic novelty typified by LORENTZ 1310 (GOET) from Catamarca, Argentina. [As an aside, LORENTZ 1310 from Catamarca, Argentina is not listed in HUNZIKER (1960), but is not expected to be in HUNZIKER’s list of types at CORD]. In this scenario, an earlier and heterotypic *Trichocline dealbata* of GRISEBACH (1879) would preempt the illegitimate (later homonym) name of HIERONYMUS (1882a, b), and the plant now known as *Trichocline dealbata* would be left without a legitimate name in *Trichocline*. Thankfully, as discussed below, this is not the case.

ICBN Art. 33.2 (GREUTER et al. 2000) allows GRISEBACH’s use of the epithet “*dealbata*” and his description, coupled with the taxonomic synonymy of CABRERA (1971) and ZARDINI (1975), for GRISEBACH’s *Trichocline dealbata* to be treated as a new combination based on *Chaetanthera dealbata* HOOK. & ARN. Specifically, ICBN Art.

33.2 in GREUTER et al. (2000) reads “If, for a presumed new combination, no reference to a basionym is given but the epithet of a previously and validly published name that applies to the same taxon is adopted, the new combination is validly published as such if, and only if, it would otherwise be validly published as the name of a new taxon.”

CABRERA (1971), ZARDINI (1975), and MARTICORENA & QUEZADA (1985) each recognized *Trichocline dealbata* “(HOOK. & ARN.) BENTH. & HOOK. f. ex GRISEB.” Additionally, CABRERA (1971) and ZARDINI (1975) each treated *Chaetanthera parviflora* PHIL. as a synonym of *Trichocline dealbata*. Neither CABRERA (1971) nor ZARDINI (1975) use the author citation of *Trichocline dealbata* as given by JACKSON (1895).

I agree with the treatments in CABRERA (1971) and ZARDINI (1975) for this species, and that the GRISEBACH name is a new combination based on *Chaetanthera dealbata* HOOK. & ARN. The citation of *Trichocline dealbata* in HIERONYMUS (1882a, b) is taken simply as that in a floristic treatment, and not as a nomenclatural innovation. The taxonomy and nomenclature of *Trichocline dealbata* follows.

### Taxonomy and Nomenclature

*Trichocline dealbata* (HOOK. & ARN.) BENTH. & HOOK. f. ex GRISEB., Abh. Königl. Ges. Wiss. Göttingen 24: 215. 1879. Basionym: *Chaetanthera dealbata* HOOK. & ARN., Companion Bot. Mag. 1: 104. 1835. Lectotype (chosen from among syntypes by ZARDINI 1975): Argentina. Mendoza: Ascent to Los Pequeños, Andes, GILLIES s.n. (lectotype: K).

*Chaetanthera parviflora* PHIL., Anales Univ. Chile 27: 335. 1865, as “*parviflor.*” Type: Argentina. Mendoza. Cordillera entre Santiago i Mendoza, al otro lado del rio Tunuyán, prope la Guardia, Jan 1865, LANDBECK s.n. (holotype: SGO; isotype: SGO). SGO herbarium sheets #43758 & #64696 were cited by MUÑOZ (1960).

*Gerbera pulvinata* KUNTZE, Revis. Gen. Pl. 3(3): 149. 1898. *Trichocline cineraria* var. *pulvinata* (KUNTZE) HAUMAN, Anales Soc. Ci. Argent. 86: 337. 1918. Type: Argentina. Paso Cruz, Cordillera, 3000 m, KUNTZE 104 (holotype: NY!).

Scapose perennial herbs to ca. 8 cm tall; caudex and rhizome woody, simple or few-branched. *Leaves* simple, alternate, petiolate, to ca. 3.2 cm long, clustered at tips of caudex branches; petiole 0.6–1.2 cm long; blade spatulate to oblong, slightly ca. 5-pinnatilobed, 1.3–2 cm long, 0.3–0.6 cm wide, subcoriaceous, venation obscurely pinnate, base attenuate, apex obtuse, margins crenate, the adaxial surface lanuginose to glabrescent, the abaxial surface white-tomentose (whence the epithet), sometimes glandular-punctate, veins glabrescent. *Capitulescence* monocephalous on each of the few caudex branches; peduncles stout, ebracteate or occasionally 1-bracteate, 2–6 cm long, lanuginose to glabrescent; receptacle weakly foveolate. *Capitula* ca. 12

mm high, heterogamous, florets bilabiate with heteromorphic corollas; involucre hemispherical, to ca. 10 × 10–17 mm; phyllaries 3–5-seriate, imbricate, gradated, 2–10 mm long, 1–2 mm wide, apically acute, outer ones deltoid grading to inner ones lanceolate. *Marginal florets* ca. 15, pistillate with staminodia, uniseriate; corolla bilabiate, strongly exerted from the involucre, white or yellow, tube 2–4 mm long, outer lip an expanded limb, elliptic-lanceolate, 8–12 mm long, 1.5–2 mm wide, abaxially tomentose, apically bi- or tridentate, teeth minute, inner lip bifid, segments filiform, coiled; staminodia ca. 2 mm long. *Central florets* many, bisexual, multiseriate; corolla shortly bilabiate; tube 4.5–7 mm long, outer lip and inner bifid lip ca. 1 mm long; anthers to ca. 5 mm long, filaments papillose; style branches ca. 0.5 mm long, dorsally papillose. *Cypselae* oblong-elliptic, shortly pubescent, to ca. 4 mm long; pappus of many scabrid bristles, often apically barbellate, to ca. 9 mm long.

**Distribution and Ecology.** *Trichocline dealbata* is known only from Argentina and Chile, where it occurs at elevations of 2000–3800 meters. The species grows in the high Andes west of the city of Mendoza, Argentina to the frontier with Chile (Provs. Mendoza and Neuquén, Argentina; O'Higgins, Chile). *Trichocline dealbata* flowers in the summer months, from about December until April. The plant is illustrated in CABRERA (1971: fig. 315) and ZARDINI (1975: fig. 29).

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## References

- BENTHAM, G. & J. D. HOOKER 1873. Compositae. In: *Genera Plantarum*, vol. 2, part I. pp. 163–533. Reeve and Co., London.
- CABRERA, A. L. 1971. Compositae. In: M. N. CORREA (ed.), *Flora Patagonica*, vol. 7. pp. 1–451. INTA, Buenos Aires.
- GREUTER, W., MCNEILL, J., BARRIE, F. R., BURDET, H. M., DEMOULIN, V., FILGUEIRAS, T. S., NICOLSON, D. H., SILVA, P. C., SKOG, J. E., TREHANE, P., TURLAND, N. J. & D. L. HAWKSWORTH (eds.) 2000. *International Code of Botanical Nomenclature* (St. Louis Code) adopted by the Sixteenth International Botanical Congress St. Louis, Missouri, July-August 1999. *Regnum Veg.* 138: xviii, 1–474.
- GRISEBACH, A. 1879. *Symbolae ad floram argentinam*. Abh. Königl. Ges. Wiss. Göttingen 24. 345 pp.
- HIERONYMUS, G. 1882a. *Plantae diaphoricae florum argentinarum*. *Bol. Acad. Nac. Córdoba* 4(3): 199–326, 4(4): 327–531.
- HIERONYMUS, G. 1882b. *Plantae diaphoricae florum argentinarum*. 404 pp. G. Kraft, Buenos Aires.
- HOOKER, W. J. & G. A. W. ARNOTT 1835. Contributions towards a flora of South America and the islands of the Pacific. *Companion Bot. Mag.* 1: 102–111.
- HUNZIKER, A. T. 1960. Catálogo de los tipos “Grisebachianos” conservados en Córdoba. *Bol. Acad. Nac. Ci. Córdoba* 41: 283–421.
- JACKSON, B. D. 1895. *Index Kewensis*, Vol. 2, fasc. IV. [641–1299]. *Psidium Gardnerianum* – Finis. Clarendon Press, London.
- MARTICORENA, C. & M. QUEZADA 1985. Catálogo de la flora vascular de Chile. *Gayana, Bot.* 42: 1–157.
- MUÑOZ, P. C. 1960. *Las especies de plantas descritas por R. A. PHILIPPI en el Siglo XIX*. Ediciones de la Universidad de Chile, Santiago.
- ZARDINI, E. M. 1975. Revisión del género *Trichocline* (Compositae). *Darwiniana* 19: 618–733.